



**CONTRA COSTA  
WATER DISTRICT**

1331 Concord Avenue  
P.O. Box H2O  
Concord, CA 94524  
(925) 688-8000 FAX (925) 688-8122  
www.ccwater.com

April 1, 2011

**Directors**

Joseph L. Campbell  
*President*

Karl L. Wandry  
*Vice President*

Bette Boatman  
Lisa M. Borba  
John A. Burgh

Jerry Brown  
*General Manager*

Delta Stewardship Council  
980 9<sup>th</sup> St Suite 1500  
Sacramento, CA 95814

Dear Chairman Isenberg and Council Members:

Contra Costa Water District (CCWD) appreciates the opportunity to review the Delta Stewardship Council's Second Staff Draft Delta Plan dated March 18<sup>th</sup>, 2011, and we offer the comments below to aid in strengthening subsequent drafts of the Plan. Key issues for an effective plan include the following:

**Water Quality** - The sole water quality policy in the Delta Plan is not sufficiently protective of drinking water. A second policy should be added stating that any covered action will avoid degrading drinking water quality consistent with existing regulations (State Water Resources Control Board (SWRCB) Resolution No. 68-16, SWRCB Resolution No. 88-63, 40 Code of Federal Regulations section 131.12) and that any unavoidable degradation associated with the covered action must be mitigated. Increased emphasis should be placed on improving the water quality of discharges and agricultural return flows. Improving water quality of these return flows not only protects beneficial uses in the watershed and Delta, it also effectively increases the water available for all beneficial uses downstream.

**Water Recycling and Conservation** - The conservation and recycling policy should recognize that for those areas within the watershed (i.e., areas in which runoff and discharges return directly to Suisun Marsh, Suisun Bay, the Delta or their tributaries) conservation, rather than recycling, is the most effective way to increase water supply reliability. Within the watershed, properly treated discharge already provides water for re-use by downstream users and protects the quality needed for both human consumption and the environment. Conservation is generally far more cost effective than re-plumbing an area for direct re-use, and has the advantage of reducing diversions, reducing water use, reducing energy use and reducing green-house gas emissions, compared to direct recycling. This is distinctly different from recycling in the export areas, where energy requirements of pumping can make recycling just as effective as conservation. Optimizing water recycling will vary by region and circumstance; however, the Delta Plan should recognize that all forms of water reuse, including indirect re-use through properly treated discharges, together with robust conservation programs will improve statewide water supply reliability.

**Adaptive Management Financing Requirements** - Guaranteeing sufficient funds upfront for adaptive management in perpetuity through endowments is not reasonable; this would effectively stop many restoration projects because they would be unaffordable by public agencies. CCWD recommends requiring a guarantee for several years of funding for adaptive management at the onset of a covered action and requirements for continued funding with mechanisms to assure funding that does not insist on endowments to fund all activities forever. The adaptive management plan should identify funding sources for long-term work required but the Delta Plan should provide for reasonable ways to guarantee funding in order to ensure restoration projects can move forward.

**Make use of existing processes** - The Delta Plan consistency determination should not duplicate existing permitting or other reporting requirements; the Delta Plan should cite existing permits that would be sufficient to demonstrate consistency. For example, on page 30 Water Resources Policy #2, proposes that all water agencies develop and implement a plan similar to an Integrated Regional Water Management Plan that needs to be updated every five years. Urban water agencies already develop an Urban Water Management Plan and many participate in Integrated Regional Water Management Plans. The Delta Plan should state that completion and implementation of existing plans, provided that all of the necessary information is included, is sufficient to demonstrate consistency.

Please see the attached documents for specific comments and suggested language. Please call me at (925) 688-8018 or Maureen Martin at (925) 688-8323 if you have any questions.

Sincerely,



Marguerite Naillon  
Special Projects Manager

MN/MM:wec

Attachments

Attachment 1  
Second Staff Draft Delta Plan  
Contra Costa Water District's Comments

p. 2 line 33-36 should read... *“Today, the valued elements of the Delta ecosystem are, by many measures, in serious decline. Specifically, the collapse of native fish populations has prompted a review of the ecological needs of these species and identified the following conditions as contributing to the decline of the ecosystem overall and the native populations that depend on it: 1) reduction in amount and diversity of habitat available, 2) changes in the timing and quantity of freshwater flow into to the Delta, 3) increases in water diversions both in the Delta and the watershed, 4) increases in urban and agricultural pollution, 5) and introduction of invasive species that have changed ecosystem functions and overwhelmed niches of native species.”*

p. 2 line 39 should read *“court-imposed constraints on water supplies exported from the Delta are increasing as native fish populations...”*

p. 3 line 28, “most of” should be deleted unless there are any examples of actions that are already developed in which case those actions should be described.

p. 7 line 39-40 these sea level rise projections should be verified by recent measured data. Each update of the Delta Plan should include measured increases in sea level rise since the last Delta Plan and any updated future projections. The projection indicates that sea level is rising by almost ½ inch per year, this is measureable and should be evident in the measured data and the actual trend should be included in the Delta Plan.

p. 8 line 5 should read *“sea level rise of as much as 55-inches...”* The best available science actually predicts a range of possible elevations and has not converged on a single number. As noted above, it is important for these projections to be accurately stated and updated with each revision of the Delta Plan.

p. 17 line 21-26 should include the following bullet *6) is willing and able to communicate with a wide range of other experts who may not qualify as independent in order to fully understand the issue and knowledge that others have developed”* (i.e., a person who will avoid past mistakes by taking a systematic and thorough investigation before investing in an opinion).

p. 23 line 26-29 should read... *“ Guarantee of two years of sufficient funds to support the immediate adaptive management process and identification of funding sources for long-term adaptive management needed. Funding the full adaptive management process (planning, implementation, monitoring, data management, analyses, obtaining the best available science, communicating results, supporting decision making and full implementation of any changes in implementation of the covered action) will not necessarily be restricted to the establishment of a full endowment at the onset of a covered action, provided an adequate process to ensure continued funding is established.”*

p. 24 GP P2. A definition of more reliable water supply and enhancing the ecosystem is needed so progress towards meeting the coequal goals can be measured. These definitions are the foundation for all covered actions and the adaptive management process.

p. 30 WR P2. Lines 4-7 should read *“ ... shall develop and implement a regional self sufficiency plan no later than January 1, 2015 that shall be updated every five years; this plan shall address*

*the key elements listed. Existing plans such as Integrated Regional Water Management Plans or Urban Water Management Plans will satisfy the requirement provided they address the key elements listed below...*

p. 30 WR P2. Lines 23-25 should read *“Each region (or agency, as appropriate) shall optimize the use of recycled water. The plan must identify additional recycling opportunities, including but not limited to properly treated return flows or discharges to the watershed, the Delta, Suisun Marsh and Bay and their tributaries, that could be implemented in a way that increases the local supply...”*

p. 30 line 41 WR P2. For those in the basin, storm water is also the water that flows through the watershed to the Delta, Suisun Marsh and Suisun Bay--it is the Area of Origin water for which those in the basin have a statutory priority. This should be recognized in this section as policy and distinguished from recovery of storm water in the export areas.

p. 31 line 3 WR P3. should read *“shall report the amount of water diverted, the amount of water used and the amount of water discharged or returned to the system ...”* The Delta Plan should require both diversions and point discharges to be measured. Those directly diverting from the Delta and the Delta watershed should report more frequently enough to estimate daily, weekly or monthly Delta outflow, as needed to meet standards.

As noted in the letter, the sole water quality policy in the Delta Plan is not sufficiently protective of drinking water. At least one more policy should be added to the Delta Plan, suggested language is provided.

p. 37 WQ P2 should be added ... *“Any covered action shall avoid degrading drinking water quality consistent with existing regulations (State Water Resources Control Board (SWRCB) Resolution No. 68-16, SWRCB Resolution No. 88-63, 40 Code of Federal Regulations section 131.12) and any unavoidable degradation associated with the covered action shall be mitigated.”*

p. 38 line 1 Although the text does not specify which regional water quality control boards, CCWD notes that the San Francisco Regional Quality Control Board must be required to do the same, as the San Francisco RWQCB regulates discharges in the western Delta and Suisun Bay, the waters of which flow into the Delta on a daily basis with the tides (along with the nutrients and pollutants discharged thereto).

p. 38 line 8 Pyrethroids are a serious issue in the Delta and regulation should be completed prior to 2021. An explanation of the dates listed for all of the recommended regulations should be given.

p. 38 line 9 should read *“All water users that directly and indirectly discharge flows to the Delta should improve the quality of discharged water to the extent feasible and participate in the Central Valley Salinity Alternatives for Long-Term Sustainability Program”*

p. 38 line 13 should read ... *“The State Water Resources Control Board should develop regulations to protect the quality of groundwater used for drinking water.”* This recommendation should be extended to all groundwater users not just the Central Valley.

p. 40 RR P2. Line 26 should read *“The proposal shall not increase risk, and where feasible reduce the risk, to public services ...”*

P 44. RR 5 CCWD is pleased to see this recommendation in the Delta Plan; the goal of the study should be to identify a suite of coordinated actions that would minimize water supply disruption following a catastrophic earthquake or flood in the Delta. Given that goal, the emergency response study must include coordinated actions among agencies such as local reclamation districts, DWR, the CVP and other responsible agencies. Since this is a recommendation rather than a policy, we suggest expanding this recommendation to include other agencies beyond DWR to ensure all levels of government are coordinated and clear on emergency response.

p. 52 Table 9-2 should be deleted as it contains outdated information that is not connected to a policy or a recommendation. A list of the storage investigation projects would be more appropriate in this section with a description of the status of each project. CCWD notes that the Los Vaqueros Reservoir Expansion Project is currently underway. Further expansion of Los Vaqueros Reservoir continues to be studied.

p. 56 CCWD has attached a memo (Attachment 2) adopted by the California Urban Water Agencies Board outlining beneficiary based financing for Delta improvements. CCWD recommends using the memo to guide the financing chapter of the Delta Plan.

Attachment 2  
California Urban Water Agencies Financing Principals for Delta Improvements



## CALIFORNIA URBAN WATER AGENCIES

DATE: May 26, 2009

TO: CUWA Board of Representatives

FROM: Board Finance Issue Group

SUBJECT: Financing Delta Improvements

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The final CUWA Financing Principles for Delta Improvements and Participants in a Healthy Delta Ecosystem and Reliable Water Supply are attached. Improving the Delta ecosystem and restoring the reliability of the Delta as a water supply is a long-term program and many stand to benefit. CUWA developed this document to provide our members with information on the numerous constituencies that will benefit from a healthy Delta ecosystem and a reliable water supply. Drinking water suppliers will benefit and there are many others who will benefit, including the general public, the agricultural industry, Delta communities, transportation, Delta infrastructure, wastewater dischargers, the recreation and tourism industry, the commercial fishing industry, and the building industry. There have been many calls for water suppliers to fund Delta improvements. CUWA's position is that all Delta users should assist in financing the billions of dollars of improvements that are needed. CUWA recommends that an evidentiary process be established to allocate financial responsibility for Delta improvements among Delta users.

The CUWA Board unanimously endorsed the Financing Principles for Delta Improvements and Participants in a Healthy Delta Ecosystem and Reliable Water Supply at its meeting on May 21. CUWA's members will use these documents in discussions with legislators and the administration on Delta financing with the goal of broadening responsibility for funding Delta improvements to include all Delta users who will benefit from the improvements.



## **CALIFORNIA URBAN WATER AGENCIES FINANCING PRINCIPLES FOR DELTA IMPROVEMENTS**

### **Prioritize Expenditures**

It is prudent and responsible for the entity / entities created to oversee improvements in the Delta to prioritize expenditures of program elements, including identification of a range of funding targets, so that the program implementation will occur in a balanced manner if funding levels are not achieved in the needed timeframe.

### **Finance Packages of Actions that Achieve Balance**

It is essential that financing continue to be linked to a balanced program that advances all key elements of the needed Delta improvements. The overall package must be affordable.

### **Delta Users Pay for Delta Improvements**

There are many Californians who use the Delta for business or recreation, have a stake in a healthy Delta ecosystem, and depend on the Delta as a reliable water supply. The general public and those Delta users with a direct stake in the Delta must assist in financing the billions of dollars of improvements needed in the Delta.

### **Public Funds Pay for Public Benefits**

CUWA agencies oppose a water user fee (tax) on water bills to pay for the state share. Funds for the state share that pay for broad public benefits should come from state sources, not from water users. However, if a water user fee (tax) concept is pursued, it is essential that it be subject to the requirements associated with imposing a new tax and the resulting revenue must be tied directly to funding specific programs.

### **Cost-sharing Agreements Provide Implementation Assurances**

Cost-sharing agreements between all related parties (including the state and federal government) are essential to assure that implementation of the program, including necessary regulatory and other assurances, is paired with available funding.

### **Responsible Parties Pay to Remedy Impacts**

General fees assessed on specific classes of Delta users should not be used to mitigate the impacts of specific projects. Project specific mitigation measures are the responsibility of the project proponents/beneficiaries and are addressed during each project's California Environmental Quality Act (CEQA) process.

## **Establish an Evidentiary Process to Allocate Delta User Financial Obligations**

A task force comprised of experts on the Delta, public finance, and other relevant disciplines should be created to develop an independent process for the purpose of implementing the Delta user pays principle. The process should meet the following criteria:

- Be transparent and open to the public
- Rely solely on evidence on the record
- Identify and include all users of Delta resources
- Clarify the distinction between public and private benefits
- Provide for public input on the proposed process
- The entity in charge of the process shall be independent

## PARTICIPANTS IN A HEALTHY DELTA ECOSYSTEM AND RELIABLE WATER SUPPLY

Every Californian gains from a Delta that has a resilient ecosystem and provides a reliable water supply, as the economic activity and tax revenues generated in those areas of the state that receive export supplies provide significant financial resources, job creation, and revenues critical to the state's economy and provision of governmental services. Moreover, there are many who use the Delta and have a stake in a healthy Delta ecosystem and a reliable water supply for California. All of these participants must assist in financing the billions of dollars of improvements needed in the Delta. Listed below are the major user groups and examples of how they will be impacted by improvements in the Delta. Table 1 provides a summary of Delta users who will benefit from Delta improvement programs. This is provided as a starting point for allocating responsibility for future financing.

### BROAD PUBLIC

#### **Impacts on Delta**

As stated previously, every Californian gains from a Delta that has a resilient ecosystem and provides a reliable water supply for the state. Consequently, the impacts on the Delta from multiple users are broadly shared by the public.

#### **Interests**

The following Delta improvement programs provide broad public benefits:

***Emergency Preparedness*** – Provides quick response to natural disasters to minimize disruption of water supplies, transportation, power, and commerce.

***Flood Control and Levee Improvements*** – Prevents flooding of Delta islands which protects water supplies, transportation, power, commerce, and public safety. It is less expensive to provide flood control infrastructure and prevent levee failures than to repair costly damages caused by emergencies.

***Habitat Restoration and Ecosystem/Watershed Protection*** – Provides ecosystem/natural resource improvements, including reduced impacts on native fish and dedicated storage for environmental water, while also contributing to improved water supply reliability, which drives the economic engine of the state. All Californians gain from these improvements.

***Delta Water Quality Improvements*** – Improves water quality for all consumers drinking water taken from the Delta with downstream agencies likely seeing the most improvement. The entire state has a stake in providing improved ecosystem water quality as it will directly improve habitat and aquatic species.

***Conveyance Programs*** – Provides water supply reliability which drives the economic engine of the state. All Californians gain from these improvements.

***Storage Projects*** – Improves water supply reliability and flood control, particularly in light of expected impacts from climate change, reduced snowpack, and highly variable hydrology in the decades to come.

**Table 1. Delta Users that Benefit from Delta Improvements**

<i>Improvements:</i>	<b>Broad Public</b>	<b>Drinking Water Suppliers</b>	<b>Agri-cultural Industry</b>	<b>Delta Communities</b>	<b>Transportation</b>	<b>Other Delta Infrastructure</b>	<b>Waste-water Discharges</b>	<b>Recreation and Tourism Industry</b>	<b>Commercial Fishing Industry</b>	<b>Building Industry</b>
<i>Emergency Preparedness</i>	•	•	•	•	•	•	•	•	•	•
<i>Flood Control and Levee Improvements</i>	•	•	•	•	•	•	•	•	•	•
<i>Habitat Restoration &amp; Ecosystem</i>	•	•	•	•	•	•	•	•	•	
<i>Water Quality Improvements</i>	•	•	•	•			•	•	•	
<i>Conveyance Programs</i>	•	•	•				•	•	•	
<i>Storage Projects</i>	•	•	•	•	•	•	•	•	•	•
<i>Water Conservation Programs</i>	•	•	•				•			•
<i>Wastewater Recycling Programs</i>	•	•	•				•			•
<i>Wastewater Treatment Improvements</i>	•	•	•	•			•	•	•	

***Water Conservation Programs*** – Provides for more water in rivers.

***Wastewater Recycling Programs*** – Meets some water demands that would otherwise utilize potable supplies, thus reducing net demands for potable water, and improves water quality for agencies downstream of wastewater discharges. Demand reduction and water quality improvements depend on location of projects.

***Wastewater Treatment Improvements*** – Improves Delta water quality due to more advanced treatment which provides benefits to many Delta users.

## DRINKING WATER SUPPLIERS

### **Impacts on Delta**

Drinking water suppliers divert water from the tributaries to the Delta and in the Delta, and export water conveyed through the Delta to supply drinking water to most of the state. These diversions impact the Delta by reducing the amount of water flowing into the Delta, changing the hydrodynamics of the Delta, and affecting the ecosystem of the Delta. These diversions adversely impact Delta salinity during low flow periods.

### **Interests**

Drinking water suppliers will benefit from the following Delta improvement programs:

***Emergency Preparedness*** – Provides quick response to natural disasters to minimize disruption of water supplies and water quality degradation for drinking water suppliers taking water from the Delta, protects aqueducts crossing the Delta.

***Flood Control and Levee Improvements*** – Prevents flooding of Delta islands which protects water supply and water quality for drinking water suppliers taking water from the Delta, protects aqueducts crossing the Delta. It is less expensive to provide flood control infrastructure and prevent levee failures than to repair costly damages caused by emergencies.

***Habitat Restoration and Ecosystem/Watershed Protection*** – Provides water supply reliability and water quality improvements for drinking water suppliers taking water from the Delta watershed. Also provides mitigation for upstream diversions.

***Delta (Drinking) Water Quality Improvements*** – Improves drinking water quality for all drinking water suppliers taking water from the Delta, with downstream agencies likely seeing the most improvement.

***Conveyance Programs*** – Provides water supply reliability and water quality improvements for drinking water suppliers taking water from the Delta. Reliability and water quality improvements depend on location of projects.

***Storage Projects*** – Improves water supply reliability, particularly in light of expected impacts from climate change, reduced snowpack, and highly variable hydrology in the decades to come. Improvements depend on location of storage projects.

***Water Conservation Programs*** – While not reducing the need for and overall reliance upon exports, urban water conservation programs can and do buffer the impact of drought and, for export agencies, regulatory restrictions on pumping from the Delta when imposed to meet

environmental goals. In addition, they reduce pumping and drinking water treatment costs for all drinking water suppliers.

***Wastewater Recycling Programs*** – Meets some water demands that would otherwise utilize potable supplies, thus reducing net demands for potable water, and improves water quality for drinking water suppliers downstream of wastewater discharges. Demand reduction and water quality improvements depend on location of projects.

***Wastewater Treatment Improvements*** – Improves Delta water quality due to more advanced treatment.

## AGRICULTURAL INDUSTRY

### **Impacts on Delta**

The agricultural industry diverts water from the tributaries of the Delta and in the Delta and exports water conveyed through the Delta to grow numerous crops and process agricultural products. These diversions impact the Delta by reducing the amount of water flowing into the Delta, changing the hydrodynamics of the Delta, and affecting the ecosystem of the Delta. The agricultural industry discharges agricultural drainage to the tributaries of the Delta and to the Delta, affecting water quality and ecosystem health. In-Delta agricultural practices contribute significantly to the ongoing subsidence of Delta islands.

### **Interests**

Agricultural interests will benefit from the following Delta improvement programs:

***Emergency Preparedness*** – Provides quick response to natural disasters to minimize disruption of water supplies and water quality degradation for agricultural operations taking water from the Delta, minimizes disruption in agricultural operations in the Delta.

***Flood Control and Levee Improvements*** – Prevents flooding of Delta islands which protects water supply and water quality for agricultural operations taking water from the Delta, protects agricultural operations in the Delta. It is less expensive to provide flood control infrastructure and prevent levee failures than to repair costly damages caused by emergencies.

***Habitat Restoration and Ecosystem/Watershed Protection*** – Provides water supply reliability and water quality improvements for agricultural operations taking water from the Delta watershed.

***Delta Water Quality Improvements*** – To the extent a particular agricultural operation needs improved water quality, improves water quality for all agricultural operations taking water from the Delta watershed with downstream operations likely seeing the most improvement.

***Conveyance Programs*** – Provides water supply reliability and water quality improvements for agricultural operations taking water from the Delta.

***Storage Projects*** – Improves water supply reliability, particularly in light of expected impacts from climate change, reduced snowpack, and highly variable hydrology in the decades to come. Improvements depend on location of storage projects.

***Water Conservation Programs*** – While not reducing the need for and overall reliance upon exports, these programs can and do buffer the impact of drought and, for export agencies,

regulatory restrictions on pumping from the Delta when imposed to meet environmental goals. In addition, they reduce pumping and drinking water treatment costs for all urban agencies.

***Wastewater Recycling Programs*** – Meets some water demands that would otherwise utilize potable supplies, thus reducing net demands for potable water, and improves water quality for agencies downstream of wastewater discharges. Demand reduction and water quality improvements depend on location of projects.

***Wastewater Treatment Improvements*** – Improves water quality due to more advanced treatment.

## DELTA COMMUNITIES

### **Impacts on Delta**

There are a number of communities in the secondary zone of the Delta, some of which are rapidly growing. These communities impact the Delta through water diversions, discharges of urban runoff and wastewater, and weakened levees due to use of Delta levee roads.

### **Interests**

Delta communities will benefit from the following Delta improvement programs:

***Emergency Preparedness*** – Provides quick response to natural disasters to minimize damage to Delta communities and economic losses.

***Flood Control and Levee Improvements*** – Prevents flooding of Delta communities and economic losses. It is less expensive to provide flood control infrastructure and prevent levee failures than to repair costly damages caused by emergencies.

***Habitat Restoration and Ecosystem/Watershed Protection*** – Provides water supply reliability and water quality improvements for Delta communities, as well as economic benefits from tourism.

***Delta Water Quality Improvements*** – Improves water quality for Delta communities.

***Storage Projects*** – Improves flood control, particularly in light of expected impacts from climate change, reduced snowpack, and highly variable hydrology in the decades to come.

***Wastewater Treatment Improvements*** – Improves Delta water quality due to more advanced treatment.

## TRANSPORTATION

### **Impacts on Delta**

There are several highways and rail lines and numerous roads and bridges that cross the Delta. The Ports of Sacramento and Stockton use the Delta to transport goods from the Bay Area to the Central Valley. Transportation impacts the Delta through discharges of contaminants from boats, greenhouse gas emissions from vehicles, and weakened levees due to the use of Delta levee roads.

## **Interests**

The transportation industry will benefit from the following Delta improvement programs:

***Emergency Preparedness*** – Provides quick response to natural disasters to minimize disruption of transportation in and across the Delta, and minimizes the economic loss associated with disruptions.

***Flood Control and Levee Improvements*** – Prevents flooding of Delta islands which protects transportation infrastructure in the Delta. It is less expensive to provide flood control infrastructure and prevent levee failures than to repair costly damages caused by emergencies.

***Habitat Restoration and Ecosystem/Watershed Protection*** – Provides flood control benefits through creation of floodways and corridors.

***Storage Projects*** – Improves flood control, particularly in light of expected impacts from climate change, reduced snowpack, and highly variable hydrology in the decades to come. Improvements depend on location of storage projects.

## OTHER DELTA INFRASTRUCTURE AND INDUSTRY

### **Impacts on Delta**

Electric transmission lines and gas and petroleum pipelines cross the Delta. The Delta also contains gas storage fields; gas and oil wells; and television, radio, and cell towers. Power plants divert cooling water from the Delta. These Delta users impact the Delta through using water diversions for turbine cooling, discharges of contaminants to Delta waterways, greenhouse gas emissions from energy production, and weakened levees due to the use of Delta levee roads.

## **Interests**

Other Delta interests and industry will benefit from the following Delta improvement programs:

***Emergency Preparedness*** – Provides quick response to natural disasters to minimize disruption of service in and across the Delta, and minimizes the economic loss associated with disruptions.

***Flood Control and Levee Improvements*** – Prevents flooding of Delta islands which protects infrastructure in the Delta. It is less expensive to provide flood control infrastructure and prevent levee failures than to repair costly damages caused by emergencies.

***Habitat Restoration and Ecosystem/Watershed Protection*** – Allows power plants to continue using Delta water for cooling. Provides flood control benefits through creation of floodways and corridors.

***Storage Projects*** – Improves flood control, particularly in light of expected impacts from climate change, reduced snowpack, and highly variable hydrology in the decades to come. Improvements depend on location of storage projects.



## WASTEWATER DISCHARGERS

### **Impacts on Delta**

There are a number of small and two large wastewater dischargers in the Delta. Contaminants in wastewater discharges may adversely affect aquatic life and drinking water quality.

### **Interests**

Wastewater dischargers will benefit from the following Delta improvement programs:

***Emergency Preparedness*** – Provides quick response to natural disasters to minimize disruption of wastewater facilities in the Delta, and minimizes fines associated with effluent violations associated with disrupted facilities

***Flood Control and Levee Improvements*** – Prevents flooding of Delta islands which protects wastewater infrastructure in the Delta. It is less expensive to provide flood control infrastructure and prevent levee failures than to repair costly damages caused by emergencies.

***Habitat Restoration and Ecosystem/Watershed Protection*** – Allows dischargers to continue to discharge to Delta waterways. Provides flood control benefits through creation of floodways and corridors.

***Delta Water Quality Improvements*** – Improves influent water quality for all wastewater agencies in areas receiving imported water, which may increase viability of wastewater recycling projects and improve ability to meet effluent limitations.

***Conveyance Programs*** – Provides water quality improvements for wastewater agencies in the areas receiving imported water, which may increase viability of wastewater recycling projects and improve ability to meet effluent limitations.

***Storage Projects*** – Improves flood control, particularly in light of expected impacts from climate change, reduced snowpack, and highly variable hydrology in the decades to come. Improvements depend on location of storage projects.

***Urban Water Conservation Programs*** – Reduces influent flows which reduces treatment costs and may defer costs associated with wastewater treatment plant expansion.

***Wastewater Recycling*** – Potential for discharge quality improvements.

***Wastewater Treatment Improvements*** – Advanced wastewater treatment may allow dischargers to discharge greater quantities of effluent.

## RECREATION AND TOURISM INDUSTRY

### **Impacts on Delta**

The Delta is heavily used for boating, fishing, swimming, camping, and hiking. There are numerous marinas, campgrounds and other recreational facilities in the Delta. Recreation and tourism impacts the Delta through water diversions, discharges of contaminants from boats, weakened levees from use of Delta levee roads, and greenhouse gas emissions from vehicles.

## **Interests**

The recreation and tourism industry will benefit from the following Delta improvements:

***Emergency Preparedness*** – Provides quick response to flooding of Delta recreational facilities and minimizes loss of life and injury.

***Flood Control and Levee Improvements*** – Prevents flooding of Delta recreational facilities and protect access to facilities. It is less expensive to provide flood control infrastructure and prevent levee failures than to repair costly damages caused by emergencies.

***Habitat Restoration and Ecosystem/Watershed Protection*** – Improves fisheries for sport fishing throughout the Delta watershed and near-shore ocean with fewer restrictions on fishing.

***Delta Water Quality Improvements*** – Improves water quality for body contact recreation.

***Conveyance Programs*** – Provides improved conditions for fish in the Delta, leading to improved recreational fishing.

***Storage Projects*** – Provides improved conditions for salmonids in Central Valley Rivers, leading to improved recreational fishing. Provides expanded recreational opportunities at new reservoirs.

***Wastewater Treatment Improvements*** – Impacts of discharges to the Delta system.

## COMMERCIAL FISHING INDUSTRY

### **Impacts on Delta**

A number of commercially important fish reside in the Delta for some portion of their lifecycle. The commercial fishing industry impacts the Delta by reducing fish populations, discharging contaminants from boats, results of greenhouse gas emissions, etc.

## **Interests**

The commercial fishing industry will benefit from the following Delta improvements:

***Emergency Preparedness*** – Provides quick response to flooding of Delta islands, protects water quality, and minimizes impacts on Delta fisheries.

***Flood Control and Levee Improvements*** – Prevents flooding of Delta islands, protects water quality, and minimizes impacts on Delta fisheries. It is less expensive to provide flood control infrastructure and prevent levee failures than to repair costly damages caused by emergencies.

***Habitat Restoration and Ecosystem/Watershed Protection*** – Improves fisheries for fishing throughout the Delta watershed and near-shore ocean, prevents closure of commercial fishing.

***Delta Water Quality Improvements*** – Provides improved water quality for fish, leading to a better commercial fishery.

***Conveyance Programs*** – Provides improved conditions for fish in the Delta, leading to a better commercial fishery.

***Storage Projects*** – Provides improved conditions for salmonids in Central Valley Rivers, leading to a better commercial fishery.

***Wastewater Treatment Improvements*** – Impacts of discharges to the Delta system.

## BUILDING INDUSTRY

### **Impacts on Delta**

The secondary zone of the Delta has some of the fastest growing communities in California. The building industry impacts the Delta through discharges of contaminants during construction, weakened levees due to construction equipment using Delta levee roads, increased flooding due to encroachment on flood space and increased impervious area, and increased discharges of contaminants in urban runoff.

### **Interests**

The building industry in areas that rely on Delta water has an interest in the reliability of the water supply because water agencies in the export areas must assure that water is available for development. The building industry will benefit from the following Delta improvements:

***Emergency Preparedness*** – Provides quick response to flooding of Delta islands, protects construction projects, and minimizes economic losses.

***Flood Control and Levee Improvements*** – Prevents flooding of Delta islands, allows development to occur, protects construction projects, and minimizes economic losses. It is less expensive to provide flood control infrastructure and prevent levee failures than to repair costly damages caused by emergencies.

***Storage Projects*** – Improves water supply reliability. Improves flood control, particularly in light of expected impacts from climate change, reduced snowpack, and highly variable hydrology in the decades to come. This allows development to occur.

***Urban Water Conservation Programs*** – The building industry benefits from improved water supply reliability that is provided by water conservation programs.

***Wastewater Recycling Programs*** – The building industry benefits from improved water supply reliability that is provided by wastewater recycling programs.